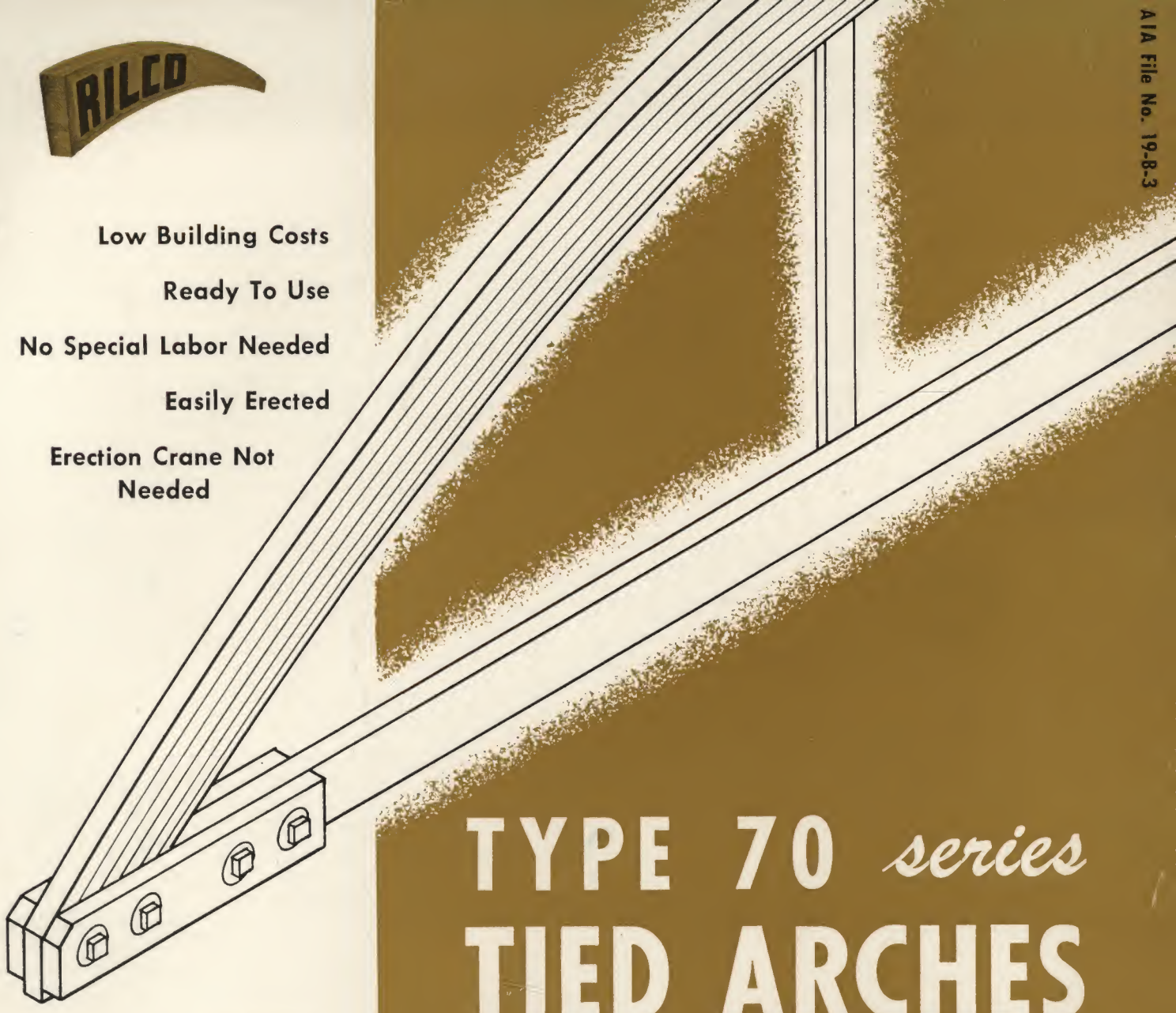
RILCO

- Low Building Costs
- Ready To Use
- No Special Labor Needed
- Easily Erected
- Erection Crane Not Needed



AIA File No. 19-B-3

TYPE 70 *series* TIED ARCHES

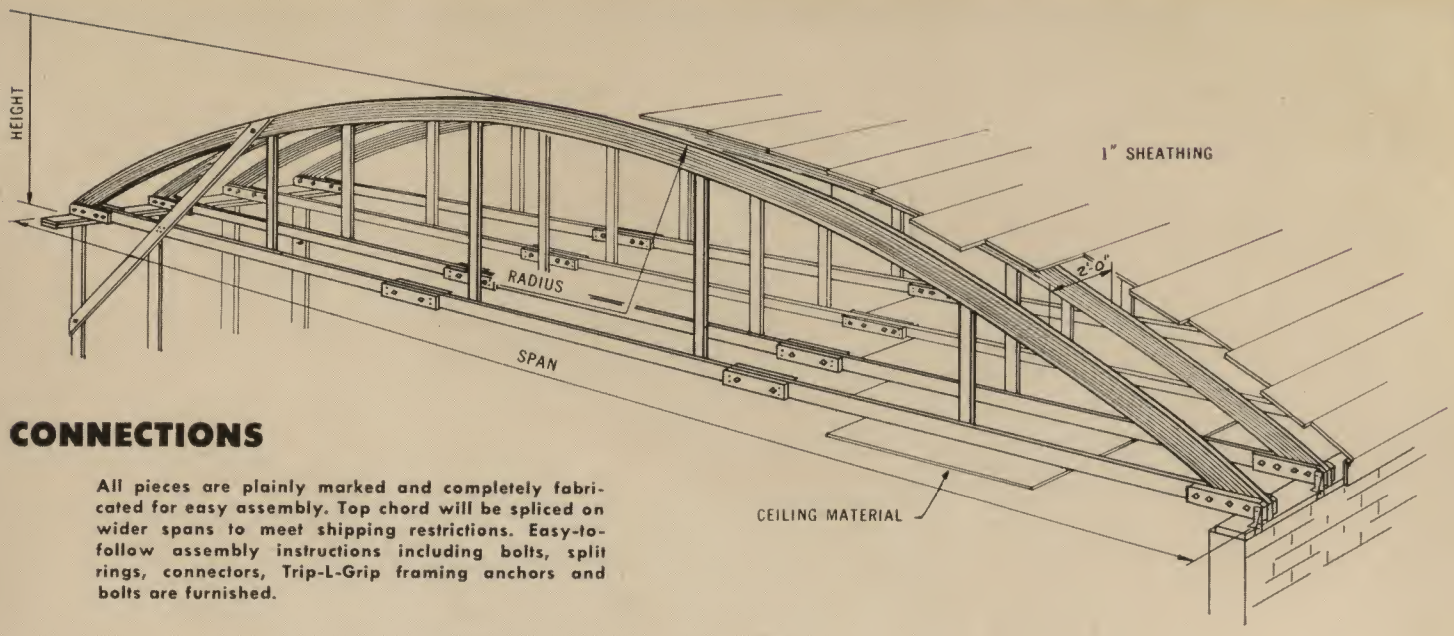
- Engineered
- Integrated Roof and Ceiling Framing
- Wall To Wall Clear Span
- Kiln-Dried Lumber
- Glued Laminated Top Chord
- Greater Fire Safety

RILCO

Works Wonders With Wood

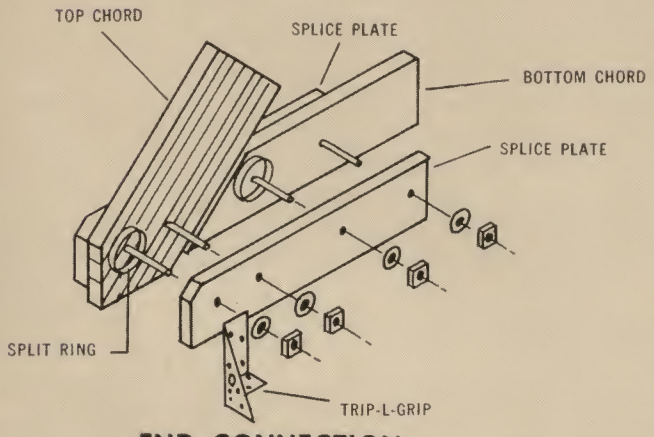
RILCO LAMINATED PRODUCTS, INC.
ST. PAUL, MINN. • WILKES-BARRE, PENNA.
FORT WAYNE, IND. • MANHATTAN, KANSAS
TACOMA, WASH.

RILCO TYPE 70 Series TIED ARCH

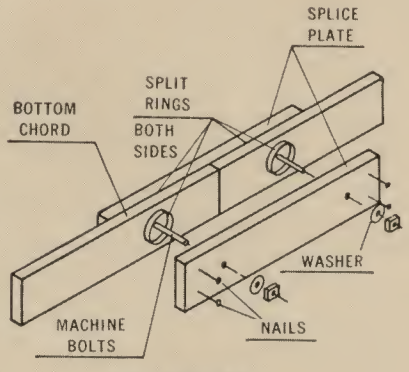


CONNECTIONS

All pieces are plainly marked and completely fabricated for easy assembly. Top chord will be spliced on wider spans to meet shipping restrictions. Easy-to-follow assembly instructions including bolts, split rings, connectors, Trip-L-Grip framing anchors and bolts are furnished.

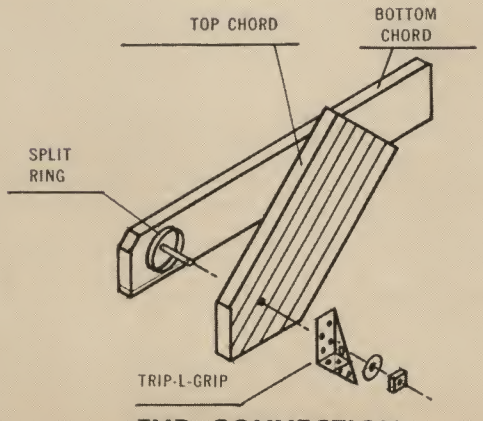


END CONNECTION
Wider, heavier loaded spans

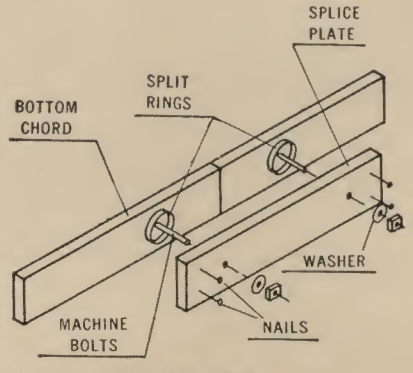


TIE SPLICE
Wider, heavier loaded spans

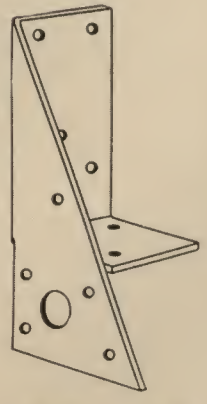
2½" SPLIT RING CONNECTOR
Pieces are factory-grooved to receive split rings.



END CONNECTION
Shorter, lighter loaded spans



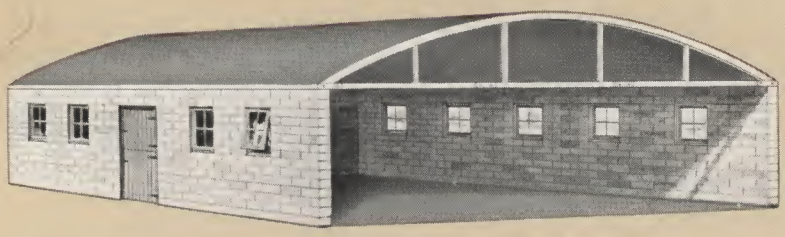
TIE SPLICE
Shorter, lighter loaded span

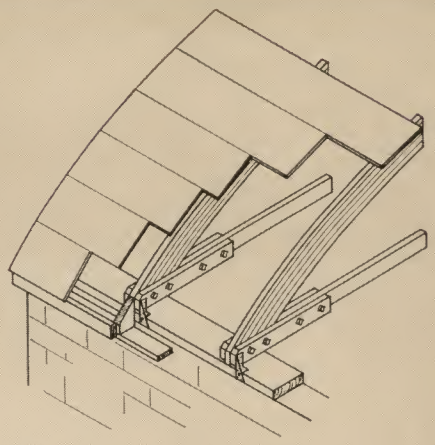


TRIP-L-GRIP FRAMING ANCHOR
Anchors arch to plate

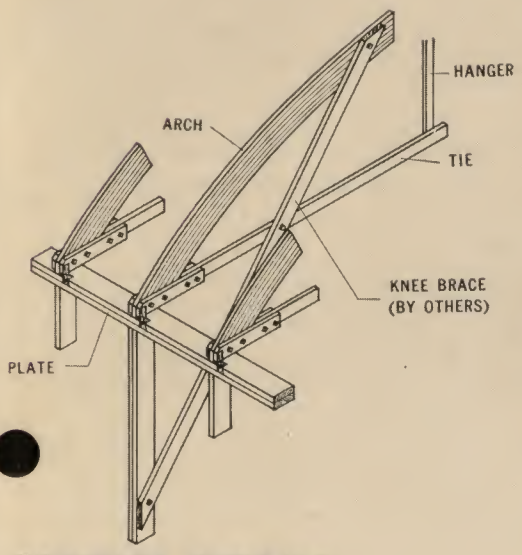
Construction is fast, easy and labor-saving w

DESIGN and CONSTRUCTION DETAILS



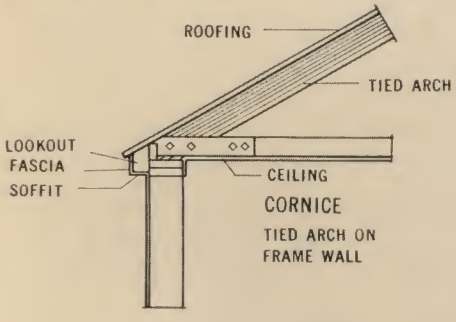


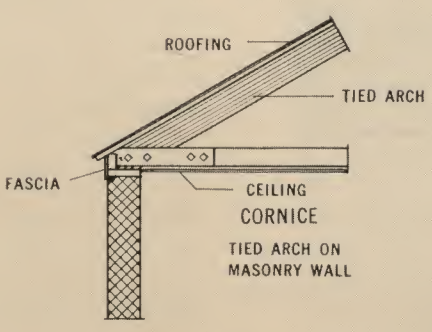
MASONRY SIDEWALL

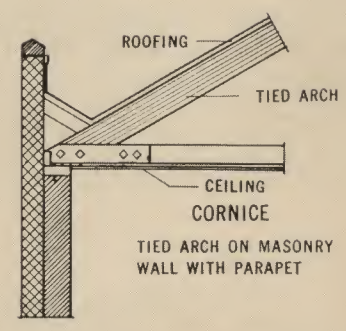


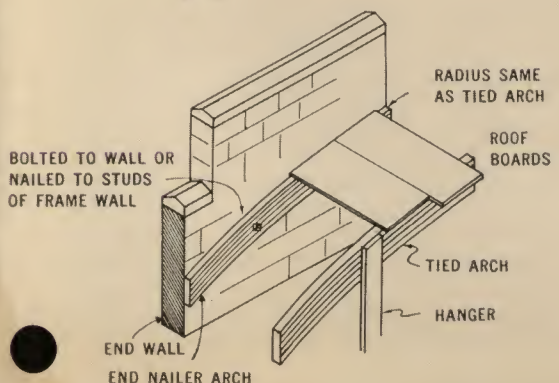
FRAME SIDEWALL

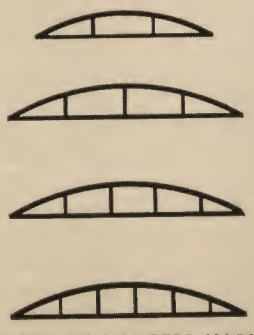
CORNICE DETAILS



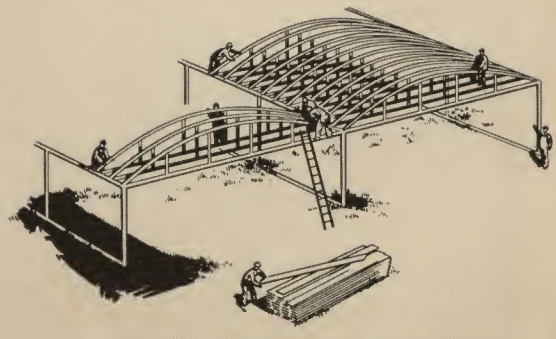








NUMBER OF HANGERS VARIES
WITH SPANS AND LOADINGS



TIED ARCHES IN TANDEM

thout special labor or equipment with RILCO

50′ x 150′ Callahan Garage, Allentown, Pennsylvania

60′ x 140′ Garry Furniture Store, Charles City, Iowa

42′ x 100′ Bayers I G A Super Market, Elm Grove, Wisconsin

Simplified Construction

Rilco tied arches provide a complete structural framing system for roof and ceiling. Arch spacing of two feet on centers permits nominal 1″ sheathing to be nailed directly to the top edges of the arches and a ceiling can be applied to tie members. That's real economy!

Assembly and Erection

Economy of erection is another important factor. Arches are light in weight. Erection is simple and easy without need of special labor. No rigging or special equipment are required. They are cut, drilled for bolts and grooved for split ring connectors . . . ready for assembly without tedious sawing or fitting. Easy to follow assembly instructions are shipped with the arches. All pieces are plainly marked.

Fire Safety

Heat from a flash fire does not immediately collapse a wood structure as it does exposed metal construction. It allows *time* . . . very often time enough to save the structure and contents.

Other Advantages

Not just a top-notch building material, but also an engineered product, Rilco tied arches take the guess work out of clear span construction. Tests made by the U. S. Forest Products Laboratory at Madison, Wisconsin, disclosed that glued laminated members have 4 times the load-bearing strength of nailed laminations of the same size.

The arched-shape provides space between ceiling and roof for heating and ventilating ducts, wiring, etc.

Experienced Rilco field Service Engineers will be glad to consult with you concerning your specific requirements and building problems. There is no cost or obligation for this helpful service.

Spans and Spacing

Available in all spans from 20 feet to 72 feet. Arches are spaced two feet on centers.

Loading

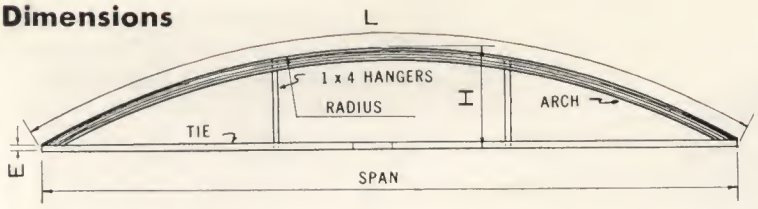
Type 70 Tied Arches are designed for a dead roof load of 10 lbs./sq. ft. and live loads from 20 lbs./sq. ft. to 40 lbs./sq. ft. as applicable. In addition, arches are designed to support a 5 lbs./sq. ft. ceiling load from lower chord tie members. Special consideration will have to be given to support concentrated loads such as hoists and cranes.

Quality Materials

Top arch chord members are glued-laminated West Coast Douglas Fir, one of the finest structural materials available. The wood including solid ties and hangers, is kiln-dried to resist warping, checking, twisting. Members are factory fabricated for accurate fitting. Modern structural glues provide a positive bond as strong as the wood itself. For protection, all parts are flow coated with wood sealer and ends of all members are sealed with one coat each of white paint and aluminum paint. Production is constantly checked and arches are manufactured to rigid specifications to assure you of quality and dependability. Only genuine Rilco arches bear the Rilco trademark, your assurance of a superior structural member that is engineered for the job.

INFORMATION

Dimensions



Span & Rad.	30 lbs./sq. ft. Live Load TYPE CC 70			25 lbs./sq. ft. Live Load TYPE BC 70			20 lbs./sq. ft. Live Load TYPE AC 70		
	H	E	L	H	E	L	H	E	L
20	2′-9 9/16″	1 9/16″	21′-0 7/8″	2′-9 9/16″	1 9/16″	21′-0 7/8″	2′-9 9/16″	1 9/16″	21′-7/8″
22	3′-0 13/16″	1 9/16″	23′-2″	3′-0 13/16″	1 9/16″	23′-2″	3′-0 13/16″	1 9/16″	23′-2″
24	3′-4″	1 9/16″	25′-3 3/16″	3′-4″	1 9/16″	25′-3 3/16″	3′-4″	1 9/16″	25′-3 3/16″
26	3′-7 1/4″	1 9/16″	27′-4 5/16″	3′-7 1/4″	1 9/16″	27′-4 5/16″	3′-7 1/4″	1 9/16″	27′-4 5/16″
28	3′-10 5/8″	1 3/4″	29′-5 5/8″	3′-10 5/8″	1 3/4″	29′-5 5/8″	3′-10 5/8″	1 3/4″	29′-5 5/8″
30	4′-1 5/8″	1 1/2″	31′-6 1/2″	4′-1 5/8″	1 1/2″	31′-6 1/2″	4′-1 5/8″	1 1/2″	31′-6 1/2″
32	4′-4 7/8″	1 9/16″	33′-7 11/16″	4′-4 7/8″	1 9/16″	33′-7 11/16″	4′-4 7/8″	1 9/16″	33′-7 11/16″
34	4′-8 3/16″	1 5/8″	35′-8 7/8″	4′-8 1/8″	1 9/16″	35′-8 13/16″	4′-8 1/8″	1 9/16″	35′-8 13/16″
36	4′-11 1/8″	1 3/8″	37′-9 3/4″	4′-11 5/16″	1 9/16″	37′-9 15/16″	4′-11 5/16″	1 9/16″	37′-9 15/16″
38	5′-2 5/16″	1 3/8″	39′-10 7/8″	5′-2 5/16″	1 3/8″	39′-10 7/8″	5′-2 1/2″	1 9/16″	39′-11 1/16″
40	5′-5 9/16″	1 3/8″	42′-0 1/16″	5′-5 9/16″	1 3/8″	43′-0 1/16″	5′-5 3/4″	1 9/16″	42′-0 1/4″
42	5′-9 1/4″	1 7/8″	44′-1 1/4″	5′-8 3/8″	1 3/8″	44′-1 3/16″	5′-9 1/8″	1 3/4″	44′-1 9/16″
44	6′-0 1/2″	1 7/8″	46′-2 7/8″	6′-0 1/16″	1 7/16″	46′-2 3/8″	6′-0″	1 3/8″	46′-2 3/8″
46	6′-3 11/16″	1 7/8″	48′-4″	6′-3 11/16″	1 7/8″	48′-4″	6′-3 3/16″	1 3/8″	48′-3 1/2″
48	6′-6 13/16″	1 3/4″	50′-5″	6′-6 15/16″	1 7/8″	50′-5 1/16″	6′-7 1/16″	2″	50′-5 3/16″
50	6′-10 3/16″	1 15/16″	52′-6 1/4″	6′-10 1/8″	1 7/8″	52′-6 1/4″	6′-10 5/16″	2 1/16″	52′-6 3/8″
52	7′-1 5/8″	2 1/8″	54′-7 5/8″	7′-1 7/16″	1 15/16″	54′-7 3/8″	7′-1 3/8″	2 3/8″	54′-7 7/8″
54	7′-5 1/8″	2 7/16″	56′-9″	7′-4 7/8″	3 1/16″	56′-9 5/8″	7′-5 1/16″	2 3/8″	56′-9″
56	7′-8 7/8″	3″	58′-10 3/4″	7′-8 1/16″	3 1/16″	58′-10 3/4″	7′-8 1/4″	2 3/8″	58′-10 1/8″
58	7′-11 3/16″	2 7/8″	60′-11 3/4″	7′-11 13/16″	3 1/16″	60′-11 7/8″	7′-11 5/8″	2 1/2″	60′-11 3/8″
60	8′-2 3/8″	2 7/8″	63′-0 7/8″	8′-2 11/16″	3 1/4″	63′-1 1/4″	8′-3 1/8″	2 13/16″	63′-0 7/8″
62	8′-5 3/4″	3″	65′-2 1/8″	8′-6 13/16″	4 1/8″	65′-3 1/4″	8′-5 3/4″	3 1/16″	65′-2 1/4″
64	8′-9 9/16″	3 5/8″	67′-3 7/8″	8′-10″	4 1/8″	67′-4 3/8″	8′-8 7/8″	3 1/16″	67′-3 1/4″
66	9′-0 13/16″	3 5/8″	69′-5″	9′-0 13/16″	3 11/16″	69′-5″	9′-0 3/8″	3 1/4″	69′-4 5/8″
68	9′-4 3/16″	3 13/16″	71′-6 3/8″	9′-4″	3 11/16″	71′-6 1/4″	9′-3 13/16″	3 1/2″	71′-6″
70	9′-6 1/4″	2 5/8″	73′-6 1/4″	9′-7 1/2″	3 15/16″	73′-7 5/8″	9′-6 1/16″	3 1/4″	73′-7 1/8″
72	9′-11 3/4″	4″	75′-8 3/4″	9′-10 11/16″	3 15/16″	75′-8 3/4″	9′-10 1/4″	3 1/2″	75′-8 1/4″

Uses

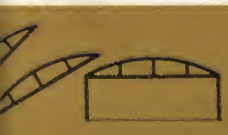
Wide, clear span, post-free Rilco buildings provide space versatility that makes the building easy to convert to new uses. This important feature of flexible space is ideal for stores, shops, theaters, garages, storage buildings, warehouses, factories, bowling alleys, skating rinks, recreation centers, and other buildings requiring wide, clear spans. Use in farm building construction is shown on next page.

60′ x 80′ Gilbert E. Tobin Company, Hudson, Wisconsin

40′ x 60′ Chase Lumber & Fuel Company, Sun Prairie, Wisconsin

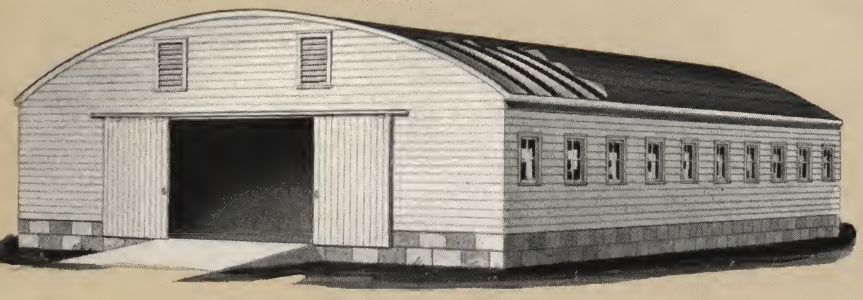
40′ x 80′ Northern States Power Co. Garage, Elmwood Wisconsin

Harter National Bank, North Canton Ohio. 44′ Span



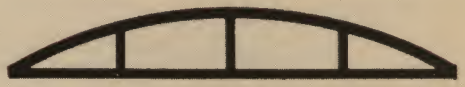
COSTS go down

FARM BUILDING CONSTRUCTION *with*



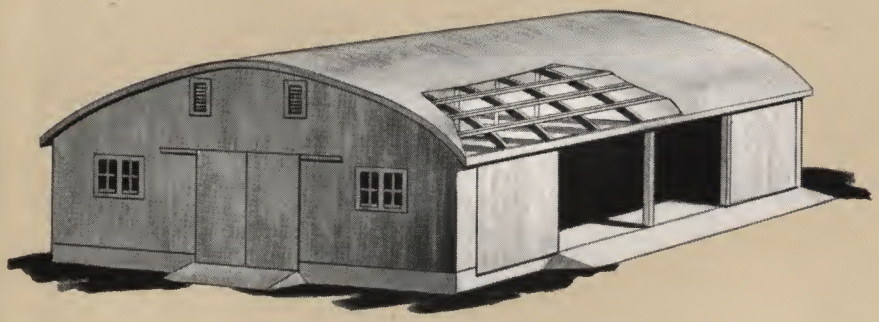
TIED ARCHES

Spaced 2 ft. on centers



SPAN	LENGTH OF ARCH	SIZE OF SECTION	NO. PLIES	HEIGHT AT CENTER OF ARCH
24	25′-3 3/16″	1 9/16″ x 3 3/4″	5	3′- 4″
30	31′-6 1/2″	1 9/16″ x 3 3/4″	5	4′- 1 5/8″
32	33′-7 11/16″	1 9/16″ x 3 3/4″	5	4′- 4 7/8″
36	37′-9 15/16″	1 9/16″ x 3 3/4″	5	4′-11 5/16″
40	42′-0 1/4″	1 9/16″ x 3 3/4″	5	5′- 5 3/4″
50	52′-6 3/8″	1 9/16″ x 4 1/2″	6	6′-10 5/16″

Also available in 60 foot spans.



TIED ARCHES

Spaced 8 ft. on centers

SPAN	LENGTH OF ARCH	SIZE OF SECTION	NO. PLIES	HEIGHT AT CENTER OF ARCH
30	31′- 9″	1 9/16″ x 6 3/4″	9	4′- 4 1/4″
32	33′-10 1/8″	1 9/16″ x 6 3/4″	9	4′- 7 7/16″
34	36′-0 1/16″	1 9/16″ x 7 1/2″	10	4′-11 1/2″
36	38′- 0 3/8″	2 1/16″ x 6 3/4″	9	5′- 1 7/8″
40	42′- 3 1/2″	2 1/16″ x 7 1/2″	10	5′- 9 1/8″
50	52′-4 5/16″	2 1/16″ x 9″	12	6′- 8 3/8″

Also available in 60 foot spans.

HERE'S WHAT CONTRACTORS SAY

46′ x 130′ IGA Foodliner, Weatherford, Oklahoma

". . . I have put up a good many dairy barns using Rilco Rafters . . . including a 38′ x 180′ gothic barn and a 40′, one story barn using Rilco Tied Arches. I find erection easy. Rilco engineering makes every job more satisfactory . . ." Charles Sickler, Mill City, Pa.

"We erected 66 Rilco Tied Arches with three unskilled men—including arch assembly—in only 85 total man hours on the 46′ x 130′ I.G.A. Foodliner in Weatherford, Oklahoma . . . and at only 25 per cent of what we figured steel erection would have cost. I used only common labor under the supervision of a carpenter—no scaffolding or cranes. John Klaassen, Weatherford, Okla.

". . . Tied Arches just seem to fit our building needs. In our locality we've constructed a theatre and a garage with Rilco framing. Both buildings went up fast and are very fine looking structures. I'm enthusiastic about Rilco construction."

Henry Jundt, Jr., Eureka, S. D.

TIED ARCHES

Type VF-72 Tied Arches

Rilco Type 72 Tied Arches are spaced 2 feet on centers, on frame or masonry sidewalls. Construction is fast and inexpensive because nominal 1" roof sheathing is nailed directly to the arches, and ceiling material can be nailed to the ties. They provide economical dairy and feeder barns, cattle sheds, poultry and hog houses and general purpose buildings.

Type 72 farm buildings are particularly well adapted to today's rapidly changing farming needs and methods because of their versatility. The wide, clear span interior is easily converted from one use to another. Post-free construction also makes every square foot of space usable, and permits easy use of power equipment for cleaning. Low initial cost, with very slight maintenance cost, means that a small investment can meet a wide variety of needs on any size farm.

Type 72 Arches are strong, easy to handle, and can be assembled and erected without special equipment. Curved sections are laminated of kiln-dried West Coast Douglas Fir. Bonded with waterproof resorcinol glue, the laminations are completely unaffected by the extreme moisture present in barns. All splices are made with metal connectors that are designed for both strength and easy assembly.

Type ZF-72 Tied Arches

The Rilco Type 72 Tied Arch brings barn construction costs down below any other type of clear span framing. You save because little labor is needed for construction—laminated arches are delivered complete with hardware, ready for quick assembly and erection. Post-free interiors give you 100% usable floor space. The curved sections are formed of kiln-dried West Coast Douglas Fir, bonded with resorcinol glue that is absolutely waterproof.

Type ZF72 arches are designed to be spaced 8′ o.c. They are also available in a lighter design for 4′ o.c. spacing. Metal may be applied directly to 2"x4" roof joists on edge. They also may be covered with 2" decking nailed directly to the arch, or 1" sheathing may be used directly over 2"x4" roof joists on edge.

Flexibility of construction is another important feature. Type 72 Tied Arches can be used on:

1. POLES to provide an engineered pole barn with interior space completely free of poles or braces.
2. POSTS for similar barn with wood columns anchored to concrete footings.
3. MASONRY walls for those who prefer this type of construction.

ABOUT RILCO CONSTRUCTION

"... It's pretty hard to beat Rilco Tied Arches for commercial garages. I completed a Buick and Pontiac job in Athens, Pa. ... The barns around here built with Rilco Rafters have been shown-off by their owners so often I get more barn jobs than I can handle. All the folks ask for Rilco barns ..."

Walter Chaffee, Ulster, Pa.

"... and I have personal reasons for talking about Rilco buildings to my farmer customers. I can handle more jobs with Rilco Rafters because buildings go up faster, they're easier to erect. Then, too, I believe the sturdy construction, pleasing appearance and brace-free space in a Rilco building gives my customers a better dollar value."

Elmer Gartner, Lena, Ill.

"... been a booster ever since I erected my first Rilco barn. I've put up lots of different types of barns, and I'm convinced Rilco Rafters make a sturdier more economical building than any other type of construction."

Evans Whitman, Durand, Ill.

"... in the three most recent projects involving use of your laminated products, I am happy to say at no time did we find cause to apologize for any of your work or material. Our experience makes us happy to recommend and use Rilco products whenever possible."

James W. Ireland, Kansas City, Mo.

60′ x 120′ Fleck Motor Co. Warehouse, Bismarck, North Dakota

TIED ARCH PROPOSAL

Date_____

Owner_____ Type Building_____

Location_____ Building Size_____

No. Arches	Type	Estimated Weight	Price Each	Total Price

This proposal effective for 30 days.

Rilco standard design and manufacturing specifications apply.

This proposal subject to Rilco terms and conditions of sale.

Rilco Laminated Products, Inc.

by_____

Total Weight_____ Total Price_____

Est. Freight_____

Total Est. Cost_____

"WORKS WONDERS WITH WOOD"

RILCO LAMINATED PRODUCTS, INC.

GENERAL OFFICES: 2591 FIRST NATIONAL BANK BUILDING, ST. PAUL, MINNESOTA
EASTERN OFFICE: WILKES-BARRE, PA., DISTRICT OFFICE: FORT WAYNE, IND., WESTERN OFFICE: TACOMA, WASH.
FACTORIES: ALBERT LEA, MINN. & LONGVIEW, WASH.
WAREHOUSES: WILKES-BARRE, PA., FORT WAYNE, IND., INDEPENDENCE, KANS., W. FARGO, N. DAK.